

REMARKS

Claims 1-3, 8 and 10-24 are presented for reconsideration.

In the Office Action, the drawings were objected to by the Draftsperson; claims 1-3, 8 and 10-24 were rejected under 35 USC 112, second paragraph; and claims 1-3, 8 and 10-24 were rejected under 35 USC 103 as being unpatentable over Olson et al in view of Rigney. In addition, U.S. Patents to Rickerby et al and Perdikaris were cited, but not applied.

With regard to the objection to the drawings, Formal Drawings will be submitted once the application has been allowed.

By this amendment, the specification has been amended on pages 2 and 3 to show that alitizing is an alternative expression for aluminizing. In addition, claim 1 has been affiended to remove the indefiniteness concerning the adhesion layer mentioned in the rejection under USC 112, second paragraph. These amendments are shown in the marked-up version affacted as an appendix to this amendment.

With regard to the Examiner's concern about alitizing, it is noted that the present application is a National Stage of a PCT Application and, if the Examiner would look on page 2, line 20 of the German text, the word is "alitieren". This is translated to read "to alitize or to aluminize" (see attached page 34 of Dictionary of Chemistry and Chemical Engineering German/English Dictionary by De Vries et al). Thus, it is submitted that the insertions to pages 2 and 3 do not involve any new matter, since they are supported by the original German text of the PCT Application. It is also submitted that with regard to the Examiner's concern, as pointed out during a telephone conference, alitizing is a metallizing, such as a diffusion, which is well-known to persons of ordinary skill in the art. Thus, it is submitted that the disclosure does describe the invention so that a person of ordinary skill in the art can practice the invention and the disclosure does comply with 35 USC 112. Therefore, it is submitted that the rejection under 35 USC 112, second paragraph, is in error and should be withdrawn with regard to the claims.

With regard to the prior art rejection, it is noted that Olson et al teaches metallizing a MCrAlY coating super-alloy by applying powder of the alloy with a flame-spraying technique onto the substrate. It is noted that in column 7, lines 40-45, the reference states that the MCrAlY coating can be applied by a plasma spraying, electron beam evaporation, electroplating, sputtering or slurry deposition. However, it is believed that this does not teach or suggest forming the alloy of the individual elements which are produced as a slip by mixing powders containing at least one of the elements of Cr, Ni and Ce with a binding agent, applying the slip on the component part, drying the slip and then aluminizing or alitizing the slip to form the adhesion layer. Thus, while the reference to Olson et al may teach or suggest coating with a similar alloy, it does not coat with a similar method as that recited in applicants' claims and, thus, does not have the advantages, as pointed out in applicants' disclosure, of allowing the slip to be easily applied in an inexpensive process.

The secondary reference to Rigney teaches using a slurry technique, but it is believed that these are slurries of alloys that are applied and not individual elements, as recited in applicants' claims. Also, while this reference may teach or suggest the subsequent step of drying, it is submitted that it does not teach or suggest applicants' invention. It is submitted that the combination of the two references is only suggested by applicants' disclosure and, thus, the rejection is based on a hindsight combination of the prior art, which is contrary to the Patent Laws. Also, it is submitted that there is no teaching or suggestion in the two references to suggest picking and choosing the various steps from one reference and combining it with the other while disregarding other steps. Therefore, it is submitted that the subject matter of claim 1 is not obvious to a person of ordinary skill in the art and that independent claim 1 and dependent claims 2, 3, 8 and 10-24 are patentable over the combination and are allowable.



In view of the amendments and explanations contained hereinabove, it is respectfully submitted that this application is now in condition for immediate formal allowance and further reconsideration to that end is earnestly solicited.

Respectfully submitted,

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CERTIFICATE OF MAILING

Ihereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on July 16, 2001.

James D. Hobart

Name of Applicant's Attorney

Signature

July 16, 2001

Date



APPENDIX

Version with markings to show changes made.

IN THE SPECIFICATION:

Page 2, paragraph starting on line 12:

- -- The attainment of this object is inventively characterized by the steps:
- a) producing a slip by mixing powder containing at least one of the elements Cr, Ni or Ce with a binding agent;
- b) applying the slip onto the component part;
- c) drying the slip at temperatures from room temperature through 300°C; and
- d) alitizing [or calorizing] or aluminizing the slip layer to form an adhesive layer, whereby the method is controlled [such] so that the adhesion layer comprises a structure having a grain size less than 75µm and a cavity proportion from 0 through 40%.--

Page 3, paragraph starting at line 23:

--In a preferred development of the method, the final step of alitizing or aluminizing the slip layer is implemented at <u>a</u> temperature between 800 and 1200°C and a duration of 1 through 12 hours. The [alitizing] <u>aluminizing</u> serves the purpose of diffusion joining and compacting the layer and is implemented in a standard method such as, for example, in the powder pack method upon introduction of Al. The Al diffuses into the layer and into the basic material of the component part.--

IN THE CLAIMS:

- --1. (Amended) Method for manufacturing an adhesion layer for a heat insulating layer that is applied onto a component part, the method comprising the steps:
 - a) producing a slip by mixing [powder] <u>powders</u> containing at least one of the elements Cr, Ni or CE with a binding agent;

- b) applying the slip onto the component part;
- c) drying the slip at temperatures from room temperature through 300°C; and
- d) alitizing the slip layer to form the adhesion layer, whereby the method is controlled [such] so that the adhesion layer comprises a structure having a grain size less than 75 µm and a cavity proportion from 0 through 40%.--

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Dictionary of Chemistry and Chemical Engineering

Second, revised and enlarged edition

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L. De Vries · H. Kolb

Wörterbuch der Chemie und der chemischen Verfahrenstechnik

Zweite, überarbeitete und erweiterte Auflage

Band 1
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dition

Alkalicellulose f al

Aldehydammoniak n aldehyde ammonia Aldehydgerbung f (Gerb) aldehyde tannage Aldehydgrün n aldehyde green aldehydhaltig aldehydic, containing aldehyde Aldehydharz n aldehyde resin Aldehydin n aldehydine, 2-ethyl-5-methylpyridine aldehydisch aldehydic Aldehydkondensation f aldehyde condensation Aldehydoxydase f (Biochem) aldehyde oxidase Aldehydsäure f aldehyde acid, aldehydic acid Aldehydverbindung f aldehyde compound Aldesulfon n aldesulfone Aldim n aldime Aldimin n aldimine Aldiminchelat n aldimine chelate Aldobiuronsäure f aldobiuronic acid Aldohexose f aldohexose Aldoketen n aldoketene Aldol n aldol; acetaldol, oxybutyric aldehyde Aldolalphanaphthylamin n aldol alpha-naphthylamine Aldolase f (Biochem) aldolase Aldolkondensation f aldol condensation Aldomedon n aldomedone Aldonsäure f aldonic acid Aldopentose f aldopentose Aldose f aldose Aldosteron n aldosterone Aldotripiperidein n aldotripiperideine Aldoxim n aldoxime Aldrin n (Insektenmittel) aldrin Alectoronsäure f alectoronic acid Alepit n alepite Alepopinsäure f alepopinic acid Aleppokammwolle f (Text) Aleppo combings Alethein n aletheine Alethin n alethine Aleudrin n aleudrine Aleuritinsäure f aleuritic acid Aleurometer n aleurometer Aleuron n (Biol) aleurone Aleuronat n aleuronate aleuronhaltig aleuronic Alexandrit m (Min) alexandrite Alexin n alexin, cytase Alfa f (Bot) alfa [grass], esparto [grass] Alfagras n alfa [grass], alfalfa Alfalfasaponin n alfalfasaponin Alfalfol n alfalfol Alfapapier n (Buchdr) esparto paper Alfenid n alfenide Algamagrün n algama green Algarobilla f (Gerb) algaroba, algarobilla Algarotpulver n algaroth powder, antimony oxychloride, basic antimony chloride Alge f (Bot) alga (pl. algae), seaweed Algebra f (Math) algebra algebraisch algebraic

Algenbekämpfungsmittel n algicide Algenbildung f formation of algae Algenfaser f seaweed fiber Algenniederschlag m deposit of algae Algenschleim m mucus of algae Algerit m algerite Algin n algin, alginic acid Alginat n alginate Alginatfaser f algin fiber Alginsäure f alginic acid Algizid n algicide Algodonit m (Min) algodonite Algolblau n algol blue Algolfarbe f algol-color Algolin n algoline alicyclisch alicyclic Alikantesoda f alicant soda Alimemazin n alimemazine aliphatisch aliphatic aliquant aliquant aliquot aliquot, proportional Alisonit m (Min) alisonite Alit n (Min) alite alitieren to alitize; to aluminize Alitieren n alitizing, aluminum diffusion coating Alival n alival Alizarin n 1,2-dihydroxy-anthraquinone, alizarin Alizarinaltrot n Turkey red Alizarinblau n alizarin blue, anthracene blue Alizarinbraun n alizarin brown, alizarin bordeaux, anthracene brown Alizarinfarbe f alizarin dye Alizarinfarblack m alizarin lake Alizaringelb n alizarin yellow Alizarinkrapplack m alizarin madder lake Alizarinlack m alizarin lake Alizarinmonosulfonsäure f alizarin monosulfonic acid Alizarinneurot n alizarin new red Alizarinreinblau n alizarin sky blue Alizarinrot n alizarin red Alizarinsäure f (obs) alizarinic acid, phthalic acid Alizarinschwarz n alizarin black Alizarinsulfonsäure f alizarinsulfonic acid Alizurol n (Farbstoff, HN) alizurol alizyklisch alicyclic Alkaleszenz f alkalescence Alkali n alkali Alkalialbuminat n alkali albuminate Alkaliamalgam n alkali amalgam alkaliarm poor in alkali Alkaliatom n alkali atom alkalibeständig alkaliproof, alkali-resistant, resistant to alkali alkalibildend alkaligenous Alkalibindemittel n alkali-binding agent Alkaliblau n alkali blue

Alkalichlorid n alk Alkalichloridelektr electrolyser Alkalicyanid n alka alkaliecht fast to al Alkaliechtfarbe fa Alkaliechtheit falk Alkaliechtrot n alk alkaliempfindlich se Alkalien pl alkalis alkalifest alkali-pro alkali-resisting alkalifrei alkali-fre Alkaligehalt m alk alkalinity Alkaligestein n alk Alkalihalogenid n Alkalihalogenidkon of alkali halides Alkalihalogenidkris Alkalihalogenidschi alkalihaltig alkalin Alkaliherstellung f Alkalihumat n alka Alkalihydrat n alka Alkalihydroxid n al Alkaliindustrie f all Alkalikarbonat n al Alkalilauge f alkali alkalilöslich soluble Alkalilösung falka Alkalimenge f amo Alkalimesser m alk Alkalimessung falk Alkalimetall n alka Alkalimetallchelat Alkalimetallion n a Alkalimeter n alkal Alkalimetrie f alkal alkalimetrisch alkal Alkalinität f alkalin Alkaliphenolat n al Alkaliphosphat n al Alkaliphotozelle f a Alkaliquellung f sw alkaliraffiniert alka Alkalireserve f alka Alkalirückstand m Alkalisator m alkal alkalisch alkaline, to alkalize Alkalischmelze fall Alkalisieranlage f a alkalisierbar alkaliz alkalisieren to alkaj alkaline, to treat v Alkalisieren n alkal

Alkalisierung falka